

**WHAT IS CLAIMED IS:**

1. An apparatus for executing a layer editing command in a pen computing system, the apparatus comprising:
  - 5 a display screen for displaying at least original text to be edited;
  - a layer generating means for generating at least one transparent layer having a layer identifier in response to a layer editing command;
  - a memory for storing trail information written on said display screen, and for storing positional information corresponding to said trail information; and
  - 10 a control section for displaying said generated transparent layer over said original text, sensing a pen input, outputting a trail of said sensed pen input on the display screen, and storing said trail information and said positional information in said memory.
- 15 2. The apparatus according to claim 1, wherein said generated transparent layer includes the same text format as said original text.
3. The apparatus according to claim 1, wherein said trail information is stored as an image and starting coordinate of the trail, and said stored trail information and said stored corresponding positional information is accessible by searching at least one index for said at least one layer identifier .
- 20 4. The apparatus according to claim 3, wherein said control section displays, more than one transparent layer sequentially over original text, thereby forming multiple layers over the original text.
- 25 5. The apparatus according to claim 3, further comprising a recognition processor for analyzing said trail information and translating said trail information into computer-processible recognition data, wherein said recognition data comprises editing symbols, font symbols, special characters, or lexigrams, and wherein said recognition data is stored separately by layer in said memory, according to said index.
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6. An apparatus for executing a layer editing command in a pen computing system, the apparatus comprising:

a display screen for displaying at least original text to be edited;

5 a layer generating means for generating at least one transparent layer having a layer identifier in response to a layer editing command;

a recognition processor for translating trail information written on said display screen into computer-processible recognition data;

10 a memory for storing said trail information, corresponding positional information, and said recognition data; and

a control section for displaying said generated transparent layer over said original text, for sensing a pen input and outputting a trail of said sensed input on said display screen, and for causing said trail information, said positional information, and said recognition data to be stored in said memory.

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7. The apparatus according to claim 6, wherein said transparent layer has the same text format as the original text.

20 8. The apparatus according to claim 6, wherein said memory stores said generated layer according to said layer identifier, and wherein said trail information is stored as an image, said positional information is stored as the start coordinate of the trail, and said recognition data is stored according to at least one index.

25 9. The apparatus according to claim 7, wherein said control section compresses said image according to a predetermined compression algorithm and causes said image to be stored in said memory.

30 10. The apparatus according to claim 9, wherein said control section displays a plurality of transparent layers sequentially over the original text in response to a user's demand, thereby forming multiple layers over the original text.

11. The apparatus according to claim 9, wherein said control section accesses at least one transparent layer from said memory in response to a user's demand, and displays said at least one transparent layer over the original text, said transparent layer including said trail information and said recognition data.

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12. The apparatus according to claim 7, wherein said control section accesses at least one layer from said memory and generates a combined text in response to a user's demand to combine layers, and wherein said control section interprets said recognition data, executes an editing function corresponding to an editing symbol, and combines changes made to said original text to generate a new text.

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13. A method of executing an editing command in a pen computing system, the method comprising the steps of:

(a) entering a layer editing mode for editing original text displayed on a screen in response to a user's demand.

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(b) generating a transparent layer having a layer identifier;

(c) sensing trail information generated by a pen input and corresponding positional information and displaying said trail and positional information on said transparent layer; and

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(d) storing said sensed trail information and positional information according to said layer identifier.

14. The method according to claim 13, wherein said transparent layer generated in step (b) has the same text format as said original text.

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15. The method according to claim 13, wherein said step (c) further includes a process of displaying said transparent layer over said original text.

16. The method according to claim 13, wherein said step (d) further comprises simultaneously displaying more than one layer in response to said user's demand.

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17. The method according to claim 13, further comprising step (e) of translating said trail information into computer-processible recognition data.

5 18. The method according to claim 17, wherein said step (e) further comprises:

processing said sensed trail information in real-time and translating said sensed trail information into recognition data;

classifying said recognition data as at least one of editing symbols, font characters, special characters and lexigrams; and

10 storing said classified recognition data.

19. The method according to claim 17, wherein said step (e) comprises:

processing off-line said sensed trail information and translating said sensed trail information into recognition data;

15 classifying said recognition data as at least one of editing symbols, font characters, special characters, and lexigrams; and

storing said classified recognition data.

20 20. The method according to claim 17, further comprising step (f) of executing an editing function according to an editing symbol, said editing symbol being determined from said recognition data, wherein said original text is changed according to said editing symbol.

25 21. The method according to claim 17, wherein said step (e) comprises:

providing for said user to review said recognition data for errors; and

providing for the correction of said errors;

wherein a separate window is provided for input by said user to correct said errors.